

REMARKS

Claims 1, 5-6, 8, 11-12 and 19 are pending in this application. Claims 2-4, 7, 9-10 and 13-18 have been canceled without prejudice or disclaimer. Claims 1 has been amended. Claim 18 has been newly added.

Applicants, by canceling or amending any claims herein, make no admission as to the validity of any rejection made by the Examiner against any of these claims. Applicants reserve the right to reassert any of the claims canceled herein or the original claim scope of any claim amended herein, in a continuing application.

Claim 1 has been amended to incorporate the features of now cancelled claims 3 and 18. Support for this amendment can be found throughout the specification and claims as originally filed.

Claim 19 has been newly added. New claim 19 is, in general, directed to a composition which comprises Dead Sea mud, demagnetized strontium hexaferrite nanoparticles dispersed in the mud, and one or more pharmaceutically acceptable additive. Support for new claim 19 can be found throughout the specification and claims as originally filed.

No new matter has been added.

In view of the remarks set forth below, further and favorable consideration is respectfully requested.

I. Interview

Applicants thank Examiner Frazier and her supervisor, Examiner Mehta, for conducting an interview with Applicants' undersigned representative. In addition,

Applicants thank the Examiner for considering additional remarks from Applicants' undersigned representative in follow-up telephone conferences. During the interview and follow-up telephone calls, the present claims, the presently cited art and the declaration (hereinafter 'the Declaration') filed on June 19, 2008. For the Examiner's convenience Applicants have resubmitted the Declaration herewith.

As discussed, Applicants respectfully submit that the Declaration provides evidence in the form of comparative data showing the presently claimed compositions, i.e., compositions comprising and/or consisting of Dead Sea mud, demagnetized strontium hexaferrite nanoparticles dispersed in the mud, and one or more pharmaceutically acceptable additive have unexpectedly superior properties over similar compositions that do not include demagnetized strontium hexaferrite nanoparticles dispersed in Dead Sea mud.

I. At page 2 of the Official Action, claims 1, 3, 5, 6, 8, 11, 12 and 18 have been rejected under 35 USC § 112, first paragraph.

The Examiner asserts claims 1, 3, 5, 6, 8, 11, 12 and 18 fail to comply with the written description requirement because the phrase "present in an amount of 1 to 20 wt %," recited in claim 1, allegedly constitutes new matter.

In view of the remarks set forth herein, the rejection of claims 1, 5, 6, 8 and 11 is respectfully traversed.

Applicants note that claims 3 and 18 have been cancelled without prejudice or disclaimer. Accordingly, Applicants submit that the rejection of claims 3 and 18 has been rendered moot.

Applicants respectfully submit that the rejection of claims 1, 5, 6, 8 and 11 has been obviated because claim 1 no longer recites the phrase “present in an amount of 1 to 20 wt %.” Claims 5, 6, 8 and 11 depend, either directly or indirectly from claim 1.

In view of the foregoing, Applicants respectfully submit that claims 1, 5, 6, 8 and 11 fully comply with 35 USC § 112, first paragraph. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

II. At page 4 of the Official Action, claims 1, 3, 5, 6, 8, 11, 12 and 18 have been rejected under 35 USC § 112, second paragraph.

The Examiner asserts claims 1, 3, 5, 6, 8, 11, 12 and 18 are indefinite because the recitation of the transition language “consisting of” is inconsistent with the phrase “optionally one or more cosmetically acceptable additive...” In this regard the Examiner asserts that the metes and bounds of the claim are unclear.

In view of the remarks set forth herein, the rejection of claims 1, 5, 6, 8, 11 and 12 is respectfully traversed.

Applicants note that claims 3 and 18 have been cancelled without prejudice or disclaimer. Accordingly, Applicants submit that the rejection of claims 3 and 18 has been rendered moot.

Applicants respectfully submit that the rejection of claims 1, 5, 6, 8, 11 and 12 has been obviated because claim 1 no longer recites the term “optionally.” Instead, claim 1 now recites a Markush group of the one or more cosmetically acceptable additive. Claims 5, 6, 8, 11 and 12 depend, either directly or indirectly from claim 1.

In view of the foregoing, Applicants respectfully submit that claims 1, 5, 6, 8, 11 and 12 are clear and definite within the meaning of 35 USC § 112, second paragraph.

Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

III. At page 5 of the Official Action, claims 1, 3, 5, 6, 8, 11, 12 and 18 have been rejected under 35 USC § 103(a) as being unpatentable over Maor et al. (WO 00/40255) in view of Zastrow et al. (US Patent No. 5,961,988) and in further view of Shiga Yoko (JP 4,108,710).

The Examiner asserts that it would have been obvious to use demagnetized magnetic particles which are magnetized for cosmetic application to the skin in the composition of Maor et al. and Zastrow. The Examiner further asserts that one would have been allegedly motivated to do so because the use of the magnetic particles of Zastrow in the form as taught by Shiga Yoko would allegedly result in the benefit of increased circulation to the skin.

In view of the remarks set forth herein, the rejection of claims 1, 5, 6, 8, 11 and 12 is respectfully traversed.

Applicants note that claims 3 and 18 have been cancelled without prejudice or disclaimer. Accordingly, Applicants submit that the rejection of claims 3 and 18 has been rendered moot.

A proper case of obviousness under 35 U.S.C. §103, requires that the prior art, as a whole, must suggest the desirability of making the claimed combination and provide a reasonable expectation of success. See *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988).

To establish a *prima facie* case of obviousness, the Examiner must satisfy three requirements. First, as the U.S. Supreme Court held in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), "a court must ask whether the improvement is more

than the predictable use of prior art elements according to their established functions. ...it [may] be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. ...it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." (*KSR*, 550 U.S. 398 at 417.) Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. *Amgen Inc. v. Chugai Pharm. Co.*, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991). Lastly, the prior art references must teach or suggest all the limitations of the claims. *In re Wilson*, 165 USPQ 494, 496 (C.C.P.A. 1970).

Further, a *prima facie* case of obviousness, if established, can be rebutted when the claimed invention yields unexpectedly improved properties or properties not present in the prior art. Rebuttal evidence may consist of a showing that the claimed compound possesses unexpected properties. *Dillion*, 919 F.2d at 692-93, 16 USPQ2d at 1901. When considering whether proffered evidence is commensurate in scope with the claimed invention, office personnel should not require the applicants to show unexpected results over the entire range of properties possessed by a chemical

compound or composition. *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987). Evidence that the compound or composition possesses superior and unexpected properties in one of a spectrum of common properties can be sufficient to rebut a *prima facie* case of obviousness. *Id.*

Applicants respectfully submit that a *prima facie* case of obviousness has not been established because the presently claimed subject matter exhibits unexpectedly superior properties over the closest prior art of record, i.e., Maor et al. In addition, Applicants once again submit that Zastrow et al. *teach away* from the presently claimed subject matter. Further, Applicants once again submit that there is no motivation to modify Maor et al. or Shiga Yoko with Zastrow et al. to arrive at the presently claimed subject matter, because doing so would change the principle operation of Zastrow et al. Independent claim 1 is directed to cosmetic preparation for topical application onto skin of a subject, the preparation consisting of: Dead Sea mud; demagnetized strontium hexaferrite nanoparticles dispersed in the mud the demagnetized nanoparticles being suitable for magnetization when applied to the skin of the subject; and one or more cosmetically acceptable additive selected from the group consisting of an antioxidant, a vitamin, a medically active agent, a chemotherapeutic agent, a radio therapeutic agent, a humidifier, a biocide, a pigment, a smell agent, an odorant, a colorant, a UV absorbent, a UV blockage agent, a thickener, a co-solvent, an emulsifier, a surfactant, a salt, propylene glycol, glycerol, hydroxypropyl cellulose, distilled water, quaternium-18 hectorite, propylene carbonate, caprylic/capric triglyceride, sorbitan isostearate, petrolatum, synthetic lanolin, mineral oil, jojoba oil, myristyl myristate, butylenes glycol, propylene glycol, cetyl PEG/PPG-10/11 dimethicone, polyglyceryl-4-isostearate,

isohexadecane, butyrospermum parkii, isopropyl myristate, phenoxyethanol, methylparaben, butylparaben, ethylparaben, propylparaben, glycerin, imidazolidinyl urea, ethylhexyl palmitate, glyceryl stearate, cetyl alcohol, PEG-40 stearate, sorbitan tristearate, dimethicone, fragrance, xanthan gum, hydroxyethyl cellulose, propylene, stearammonium chloride, lactic acid, oleyl alcohol, PEG-100 stearate, magnesium aluminum silicate, sodium laureth sulfates, ammonium lauryl sulfate, lauramide DEA and a vegetable extract. Claims 5, 6, 8, 11 and 12 each depend, either directly or indirectly, from claim 1.

In contrast to the presently claimed subject matter, Maor et al. is directed to a pharmaceutical cream composition for topical application for the treatment of skin disorders and skin diseases, comprising 1-6 wt% Dead Sea Mud as an active ingredient. See Maor et al. at the abstract.

Zastrow et al. is directed to cosmetic and dermatological preparation for treating sensitive tissue, wounds and hair that contain magnetically hard particles such as barium or strontium hexaferrite single crystals, samariumcobalt particles (SmCo) and neodymium-iron-boron particles. See Zastrow et al. at the abstract.

Shiga Yoko is directed to magnetic cosmetic compositions for improving blood flow. See Shiga Yoko at the abstract.

A. Unexpectedly Superior Properties

From the outset, Applicants note that the Maor et al. international application is owned by Dead Sea Laboratories, Ltd., which is the assignee of the presently claimed subject matter. In addition, Applicants submit that Maor et al. is an international application that describes and relates the assignee's Dermud® product. As evidence of

this Applicants submit herewith Attachment A. Attachment A is a screen shot of <http://www.deadsearava-rd.co.il/?CategoryID=169&ArticleID=94>, which is a short biographical description of Ze'evi Ma'or's (Maor) work. As described at page 3 of Attachment A, the Maor et al. international application (WO 00/40255) is related to and describes Dermud®.

Turning now to the Declaration submitted in the present application on June 19, 2009, Applicants note that the Declaration shows comparative data between an embodiment of the presently claimed subject matter, which is referred to as Dermud® body cream containing 1% nano $\text{SrFe}_{12}\text{O}_{19}$, and Dermud® body cream alone. According to the experiments conducted, the Dermud® body cream containing 1% nano $\text{SrFe}_{12}\text{O}_{19}$, application of Dermud® body cream containing 1% nano $\text{SrFe}_{12}\text{O}_{19}$ resulted in a moisturizing effect 2.5 times than the Dermud® body cream alone. See the declaration at page 2.

Regarding unexpected results, MPEP § 716.02(a)II provides that:

Evidence of unobvious or unexpected advantageous properties, such as superiority in a property the claimed compound shares with the prior art, can rebut prima facie obviousness. "Evidence that a compound is unexpectedly superior in one of a spectrum of common properties . . . can be enough to rebut a prima facie case of obviousness." No set number of examples of superiority is required. *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987) (Evidence showing that the claimed herbicidal compound was more effective than the closest prior art compound in controlling quackgrass and yellow nutsedge weeds in corn and soybean crops was sufficient to overcome the rejection under 35 U.S.C. 103, even though the specification indicated the claimed compound was an average performer on crops other than corn and soybean.). See also *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990) (unexpected superior therapeutic activity of

claimed compound against anaerobic bacteria was sufficient to rebut prima facie obviousness even though there was no evidence that the compound was effective against all bacteria).

In the present application, since Maor et al. is the primary reference relied upon, it would logically follow, that the Examiner considers it to be the closest prior art. As shown in the Declaration, the presently claimed subject matter has superior moisturizing properties over the closest prior art of record, i.e., Maor et al. As held in *In re Chupp*, evidence showing that the claimed compound is more effective than the compound of the closest prior art is sufficient to overcome a rejection under 35 USC § 103. In view of this Applicants submit that, as evidenced by the Declaration, the presently claimed subject matter is non-obvious within the meaning of 35 USC § 103. For at least this reason, Applicants respectfully request reconsideration and withdrawal of this rejection.

B. Teaching Away

As discussed in the previously filed Amendment and Response, Applicants respectfully submit that Zastrow et al. *teach away* from independent claim 1. Specifically, Applicants submit that ***Zastrow et al. require lamellar aggregates be present in an amount of at least 2.5 wt %, based on the total composition in order to operate. See Zastrow et al. at column 2, lines 17-22. However, in complete contrast, independent claim 1 cannot include lamellar aggregates present in any amount.***

Applicants note that independent claim 1 has recites the closed ended transition language “consisting of.” In view of this transition language, as well as the elements recited in claim 1, Applicants submit that lamellar aggregates are not present in the claimed subject matter. As Zastrow et al. expressly indicate that lamellar aggregates

must be present in the amount specified, a skilled artisan would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the Applicant. Accordingly, Applicants submit that, as set forth by the court in *In re Gurley*, Zastrow et al. *teach away* from the presently claimed subject matter.

C. No Motivation to Modify

In addition to teaching away from the presently claimed subject matter, Applicants submit that there is no motivation to modify the cited references to achieve the presently claimed subject matter as doing so would destroy the principle operation of Zastrow et al. and the a proposed modification would render Zastrow et al. unsatisfactory for its intended purpose.

As discussed, Applicants submit that that ***Zastrow et al. require lamellar aggregates be present in an amount of at least 2.5 wt %***, based on the total composition in order to operate. See Zastrow et al. at column 2, lines 17-22. However, in complete contrast, ***independent claim 1 cannot include lamellar aggregates present in any amount.***

Again, Applicants note that independent claim 1 recites the closed ended transition language “consisting of.” In view of this transition language, as well as the elements recited in claim 1, Applicants submit that lamellar aggregates cannot be present in the claimed preparation. As Zastrow et al. expressly indicate that lamellar aggregates must be present in order to operate, Applicants submit that there is no motivation to modify the cited references because doing so would destroy the principle operation of Zastrow et al. and the a proposed modification would render Zastrow et al.

unsatisfactory for its intended purpose

In view of the remarks set forth herein, it is submitted that, whether taken alone or in combination, none of the cited references render claims 1, 5, 6, 8, 11 and 12 obvious within the meaning of 35 USC § 103(a). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

IV. New Claim 19

Claim 19 has been newly added. As discussed, new claim 19 is in general, directed to a composition which comprises Dead Sea mud, demagnetized strontium hexaferrite nanoparticles dispersed in the mud, and one or more pharmaceutically acceptable additive.

Applicants respectfully submit that new claim 19 is novel and non-obvious for at least the reason that new claim 19 possesses unexpectedly superior properties over the prior art for the same reasons discussed above with regard to pending claim 1. For the sake of compact prosecution the remarks regarding unexpected superiority are not repeated, but rather incorporated herein by reference. Accordingly, Applicants respectfully request an indication that all of the pending claims are now allowable.

CONCLUSION

In view of the foregoing, Applicant submits that the application is in condition for immediate allowance. Early notice to that effect is earnestly solicited. The Examiner is invited to contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

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